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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,900

06/13/2006

Arnaud Bailleul

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04/02/2010

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EXAMINER

DAO, THUY CHAN

ART UNIT

PAPER NUMBER

2192

MAIL DATE

DELIVERY MODE

04/02/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,900	Applicant(s) BAILLEUL, ARNAUD	
	Examiner Thuy Dao	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on January 6, 2010 has been entered.

2. Claims 1 and 3-10 have been examined.

Response to Amendments

3. Claim 2 has been canceled.

4. The objection to the specification and claim 1 is withdrawn in view of Applicant's amendments.

Claim Objections

5. Claims 1 and 8 are objected to because of minor informalities.

Claim 1:

In line 1, acronym "UML" should be spelled out in full at the first occurrence in claims.

Line 4, the phrase is considered to read as - -using a [[constraint]] constraint adding function...- -.

Claim 8:

Claim 8 seems to be identical with claim 5. Both claims 5 and 8 depend on the same claim 1 and one of them should be canceled.

Appropriate correction is requested.

Response to Arguments

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6. Applicants' arguments have been fully considered. Examiner notes that Applicants' amendments necessitated the new ground(s) of rejection presented in this Office action as set forth in details below.

Claim Rejections – 35 USC §102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. Claims 1, 3, 4, and 7 are rejected under 35 U.S.C. 102(a) as being anticipated by Rhapsody-4.1 (art of record, "Essential Rhapsody in C++" version 4.1, published January 1, 2003).

Claim 1:

Rhapsody-4.1 discloses *a method of requirements traceability based on a UML model, comprising the steps of:*

using a graphics interface (e.g., page E1-8, Rhapsody Object Model Diagram as a graphics interface, using the Browser in left panel, which shows every element such as package, class, use case,... in a UML model)

when creating an element of the UML model (e.g., page E1-9, creating a class/element "Display"; wherein "Display" has a creation "Hello"),

using a constraint adding function of a modeling tool (pages E1-11 and E1-12, using tab "Implementation" after right-clicking "Features" and adding the requirement/constraint "Hello World" must be displayed as the result of the executable - see page E1-19)

for attaching a requirement immediately on a common element (e.g., page E1-12, Features of "Constructor: Display in Display" as a common element)

that contains a set of elements (page E1-12, Features has elements General, Implementation, Relations, Tags, and Properties), *and*
on which the requirement has repercussions (page E1-21, cout << "Hello World" << end; now has repercussions on the Rhapsody graphics interface)
in this graphics interface (pages E1-8 to E1-12, E1-21, all figures/windows/dialogs/tabs in Rhapsody interface); *and*
wherein the element is systematically filled in with an upward requirement which has given rise to a creation of the element (e.g., page E1-18, generating code, i.e., creation of said class/element "Display" and said class/element "Display" is generated/inserted/filled in with the implementation requirement/constraint (outputting "Hello World"); page E1-19, outputting "Hello World" as the added/attached requirement/constraint).

Claim 3:

Rhapsody-4.1 discloses *the method as claimed in claim 1, comprising the steps of: when an element of the model is deleted, all the UML requirements attached to this element are likewise deleted* (e.g., page E1-9, deleting class "Display" from the entire model).

Claim 4:

Rhapsody-4.1 discloses *the method as claimed in claim 3, wherein all the UML requirements attached to all the elements attached to said element are likewise deleted* (e.g., page E1-10, when class "Display" is deleted, its constructor is also deleted with all attached requirements).

Claim 7:

Rhapsody discloses *the method as claimed in claim 1, wherein when an element of the model is deleted, all the UML requirements attached to this element are likewise deleted* (e.g., page E1-9, a class is deleted from the entire model; page E1-11, "Delete from Model").

Claim Rejections – 35 USC §103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 5, 6, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhapsody-4.1 in view of Kobryn (art of record, “Visual Requirements-Driven Development with UML 2.0”).

Claim 5:

Rhapsody-4.1 does not explicitly disclose *the method as claimed in claim 1, comprising the steps of: the UML requirements are exported to a requirements management tool so as to ensure therein their management and their traceability.*

However, in an analogous art, Kobryn further discloses *the UML requirements are exported to a requirements management tool so as to ensure therein their management and their traceability* (e.g., page 26, 29, and 31).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Kobryn’s teaching into Rhapsody-4.1’s teaching. One would have been motivated to do so to “navigate to DOORS” as suggested by Rhapsody-4.1 (e.g., page E1-11) and automate validation and verification as suggested by Kobryn (e.g., page 26, 29, and 31).

Claim 6:

Rhapsody-4.1 discloses *the method as claimed in claim 5, comprising the steps of: the UML requirements are exported to the requirements management tool, in the*

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course of the development of the model, each time that this model has attained a stable state.

However, in an analogous art, Kobryn further discloses *the UML requirements are exported to the requirements management tool, in the course of the development of the model, each time that this model has attained a stable state* (e.g., page 26, 29, and 31).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Kobryn's teaching into Rhapsody-4.1's teaching. One would have been motivated to do so to "navigate to DOORS" as suggested by Rhapsody-4.1 (e.g., page E1-11) and iterate testing/validation/verification upon the granularity of the requirements as suggested by Kobryn (e.g., page 26-27, 29, and 31).

Claims 8-10:

Claims 8-10 depend on claims 1 and 3-4, which recite(s) the same limitations as those of claim 5, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim(s), it also teaches all of the limitations of claims 8-10.

Conclusion

11. Any inquiry concerning this communication should be directed to examiner Thuy (Twee) Dao, whose telephone/fax numbers are (571) 272 8570 and (571) 273 8570, respectively. The examiner can normally be reached on every Tuesday, Thursday, and Friday from 6:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

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applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Twee Dao/

Examiner, Art Unit 2192